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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,288	08/16/2001	Robert Wesley Bossemeyer	AMT-9712CIP	2228
7590	05/17/2005		EXAMINER	
Law Offices of Dale B. Halling Suite 311 24 South Weber St. Colorado Springs, CO 80903				CHO, HONG SOL
		ART UNIT		PAPER NUMBER
		2662		

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/931,288	BOSSEMEYER ET AL.
	Examiner	Art Unit
	Hong Cho	2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1)  Responsive to communication(s) filed on \_\_\_\_.
- 2a)  This action is FINAL.                            2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4)  Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) 21 is/are allowed.
- 6)  Claim(s) 1-20 is/are rejected.
- 7)  Claim(s) \_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on 16 August 2001 is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a)  All    b)  Some \* c)  None of:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: ____.

**DETAILED ACTION*****Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The abstract of the disclosure is objected to because it includes the title of the invention. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al (U.S 6026151), hereinafter referred to as Bauer in view of Ng et al (U.S 6243376), hereinafter referred to as Ng.

Re claim 1, Bauer discloses a switching system providing voice and data telephone service to subscribers connected through telephone lines to each switching system (*operating a home gateway system comprising the steps of connecting a telephone to a data telephony interface of the home gateway system, figure 1; column 3, lines 5-8*), dialing the dialed number (*dialing a destination*

*telephone number, column 5, lines 64-66), receiving a call at its switching fabric, forwarding the call to the processor and determining the routing number of Internet Service Provider (ISP) which the subscriber requires (triggering on a call request at a switch of the home gateway system and sending a query to a processor of the home gateway system, receiving a reply from the processor including a telephone number of an internet service provider, column 4, lines 26-40), connecting to the desired ISP (establishing a telephony connection with ISP, column 4, lines 62-65). Bauer fails to disclose sending a message to the ISP including the destination phone number. Ng discloses submitting a recipient's telephone number once connected to the ISP (figure 7; column 11, lines 62-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bauer to send a message to the ISP with the destination phone number so that the ISP can route a call to the correct destination node. The motivation to combine is to use the function of ISP in routing network packets used for initiating and terminating telephone calls.*

Re claim 2, Bauer discloses all of claim limitations of a base claim but fails to disclose digitizing an audio signal, packetizing the digitized signal to form a plurality of outgoing packets and transmitting the plurality of outgoing packets to the ISP. Ng discloses converting voice signals into a data packet format suitable for transmission over the Internet (column 3, lines 60-63). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bauer to convert an audio signal to a data packet so that a voice call is connected over the Internet through ISP. The motivation is to use Voice

over Internet Protocol (VoIP) that converts a traditional voice signal into a stream of packets that are distributed over a packet network so that packet switched network is utilized to support voice calling system.

Re claim 3, Bauer discloses all of claim limitations of a base claim, but fails to disclose receiving a plurality of incoming packets from the ISP, converting the plurality of incoming packets into an incoming audio signal and connecting the incoming audio signal to the telephone. Ng discloses processing the incoming data packet format into audio signals reproducible as voice through the phone (column 3, lines 63-66). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bauer to convert a data packet back to an audio signal so that a voice call is connected over the Internet through ISP. The motivation is to use VoIP that converts a stream of packets back into traditional voice signal to support conventional telephone system.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer in view of Ng and further in view of Lin et al (U.S 6791952), hereinafter referred to as Lin.

Re claim 4, Bauer and Ng disclose all limitations of the base claim, but fail to disclose establishing a wireless local loop connection to a base station (BS) and connecting the BS to the ISP. Lin discloses a BS, which is connected to the ISP (figure 4; column 9, lines 5-6), serving a plurality of subscriber radio terminals through wireless access link (figure 4, elements 410 and 411; column 8,

lines 42-45). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bauer to implement Lin's wireless Internet access system to provide efficient provision of asymmetric data services.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer in view of Ng and further in view of Gerszberg et al (U.S 6542500), hereinafter referred to as Gerszberg.

Re claim 5, Bauer and Ng disclose all limitations of the base claim, but fail to disclose compressing the digitized signal. Gerszberg discloses compressing IP packets and the voice (column 27, lines 63-66). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Bauer to implement the function of Gerszberg's processor to compress digitized signal to conserve additional amount of bandwidth.

Re claim 6, Bauer and Ng disclose all limitations of the base claim, but fail to disclose determining a priority of the plurality of outgoing data packets and when the priority is low, storing the plurality outgoing packets until all of a high priority data packets have been transmitted. Gerszberg discloses the processor in the Intelligent Services Director (ISD) configured to discriminate between the various forms of traffic (*determining a priority of the plurality of outgoing data packets*) and distributing high priority packets from one or more priority queues (*when the priority is low, storing the plurality outgoing packets until all of a high priority data packets have been transmitted*, column 19, lines 54-65). It would have been obvious to one having ordinary skill in the art at the time the invention

was made to modify Bauer to implement the function of Gerszberg's processor to provide guaranteed bandwidth and latency service by distributing packets based on priority scheme.

Claims 7, 8 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Bauer.

Re claims 7 and 8, Lin discloses sending a command to a transceiver to establish the external connection, establishing a wireless local loop connection to a base station (figure 4; column 8, lines 53-56) and establishing a telephony connection to a service provider (figure 4; column 9, lines 5-6). Lin fails to disclose receiving a request requiring an external connection at a router to establish an asymmetrical data link access and passing the request to a processor. Bauer discloses receiving a call request to provide an asymmetrical link access and the processor recognizing the call as one directed to ISP (column 3, lines 60-66). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lin to include Bauer's switching system to route the call to the telephone network for routing to the switching system for delivery to the ISP.

Re claims 13-15, Lin discloses sending a command to a transceiver to establish the external connection, establishing a wireless local loop connection to a base station (figure 4; column 8, lines 53-56) and establishing a telephony connection to a service provider (figure 4; column 9, lines 5-6). Lin fails to disclose receiving a request requiring an external connection at a router to

establish an asymmetrical data link access and passing the request to a processor.

Bauer discloses receiving a call request to provide an asymmetrical link access and the processor recognizing the call as one directed to ISP (column 3, lines 60-66). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lin to include Bauer's switching system to route the call to the telephone network for routing to the switching system for delivery to the ISP.

Claims 9-11 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Bauer and further in view of Gerszberg.

Re claims 9 and 10, Lin and Bauer disclose all limitations of the base claim, but fail to disclose determining a priority of the plurality of data packets and when the plurality of data packets have a low priority and a high priority data packets are received for transmission over the external connection, sending the high priority packets before sending the plurality of data packets and multiplexing the plurality of compressed data packets with the high priority data packets over the external connection. Gerszberg discloses the processor in the Intelligent Services Director (ISD) configured to discriminate between the various forms of traffic (*determining a priority of the plurality of outgoing data packets*) and distributing high priority packets from one or more priority queues (*when the priority is low, storing the plurality outgoing packets until all of a high priority data packets have been transmitted*, column 19, lines 54-65). Gerszberg discloses multiplexing the voice signals and data signals for transmission to one or more

external networks (column 13, lines 33-38). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lin to implement the function of Gerszberg's processor to provide guaranteed bandwidth and latency service by distributing packets based on priority scheme and multiplexing packets.

Re claim 11, Lin and Bauer disclose all limitations of the base claim, but fail to disclose receiving the request from a television processing system for an information service provider request and sending received information over a channel to a television. Gerszberg discloses providing CATV services to subscribers (figure 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lin to implement a television processing system of Gerszberg to provide integrate services so that any requested information would be available based on subscriber preferences.

Re claims 16 and 17, Lin and Bauer disclose all limitations of the base claim, but fail to disclose receiving the request from a television processing system for an information service provider request and sending received information over a channel to a television. Gerszberg discloses providing CATV services to subscribers (figure 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lin to implement a television processing system of Gerszberg to provide integrate services so that any requested information would be available based on subscriber preferences.

Re claim 18, Lin and Bauer disclose all limitations of the base claim, but fail to disclose television system receiving an email request, directing the processor to download an email and sending the email over the selected channel of the television. Gerszberg discloses providing email services (column 24, lines 24-26). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lin to provide emergency services by Gerszberg's television processing system so that wide range of telephony services are accessed based on users' preference for communication over the Internet.

Re claim 19, Lin and Bauer disclose all limitations of the base claim, but fail to disclose an emergency broadcast network receiver connected to the television processing system. Gerszberg discloses providing emergency services (column 14, lines 57-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lin to provide emergency services by Gerszberg's television processing system for providing a faster emergency broadcast over the Internet.

Claims 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Bauer and further in view of Ng.

Re claim 12, Lin discloses establishing a telephony connection to a service provider (figure 4; column 9, lines 5-6), but fails to disclose receiving a request from the data telephony interface at a switch, sending a query to the processor, receiving a reply from the processor including a telephone number of an internet phone service provider and sending a message to the internet phone service

provider including a destination phone number. Bauer discloses a switching system providing voice and data telephone service to subscribers connected through telephone lines to each switching system (*operating a home gateway system comprising the steps of connecting a telephone to a data telephony interface of the home gateway system*, figure 1; column 3, lines 5-8), dialing the dialed number (*dialing a destination telephone number*, column 5, lines 64-66), receiving a call at its switching fabric, forwarding the call to the processor and determining the routing number of Internet Service Provider (ISP) which the subscriber requires (*triggering on a call request at a switch of the home gateway system and sending a query to a processor of the home gateway system, receiving a reply from the processor including a telephone number of an internet service provider*, column 4, lines 26-40), connecting to the desired ISP (*establishing a telephony connection with ISP*, column 4, lines 62-65). Lin and Bauer fail to disclose sending a message to the ISP including the destination phone number. Ng discloses submitting a recipient's telephone number once connected to the ISP (figure 7; column 11, lines 62-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lin to send a message to the ISP with the destination phone number so that the ISP can route a call to the correct destination node. The motivation to combine is to use the function of ISP in routing network packets used for initiating and terminating telephone calls.

Re claim 20, Lin and Bauer disclose all limitations of the base claim, but fail to disclose home gateway system including a voice mail system.

Ng discloses the Internet phone with a voice mail system. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lin to implement a voice mail system of Gerszberg to provide integrate services including telephony and Internet services.

***Allowable Subject Matter***

5. Claim 21 is allowable.

The following is an examiner's statement for reasons for allowance.

6. Claim 21 is allowable over the prior art of record since the cited references taken individually or in combination fail to particularly teach or fairly suggest a home gateway system comprising a transceiver including a vocoder and a multiplexer, a switch connected to the transceiver having a telephony and a data telephony input, a processor connected to the switch, a router connected to the switch capable of routing data between a plurality of ports, a television processing system connected to the router, the television processing system capable of receiving an information from the router and sending the information over a predetermined channel to a television for display, an emergency broadcast system receiver connected to the television processing system, and wherein the switch receives a destination address over the data telephony input and sends a query to the processor, the processor returns a response including an internet phone provider number, the switch passes the internet phone provider number to the transceiver, the

transceiver establishes a telephony connection with an internet phone provider  
including a wireless local loop connection to a base station.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - US Patent (6377568) to Kelly
  - US Patent (6546003) to Farris
  - US Patent (6870827) to Voit et al
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3088.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair>

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5-5-2005

  
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